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Application Number	10/627,355		•	
Filing Date	July 24, 2003			
First Named Inventor	Rodolfo R. Llinas		_	
Art Unit	N/A 2129			·
Examiner Name	Not-Yet-Assigned	Peter	Co	ighlan

Attorney Docket Number | 05986/100K520-US1

	U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No.1	Document Number Number-Kind Code ² (if known)	Publication Date MM-OD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	
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	FOREIGN PATENT DOCUMENTS						
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		NON PATENT LITERATURE DOCUMENTS	
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PC	1	Elena Leznik, et al.; "Electrotonically Mediated Oscillatory Patterns in Neuronal Ensembles: An In Vitro Voltage-Dependent Dye-Imaging Study in the Inferior Olive"; The Journal of Neuroscience, April 1, 2002, 22(7), pages 2804-2815	
	2	Manuel G. Velarde, et al.; "Modeling inferior olive neuron dynamics"; Neural Networks 15, (2002), 5-10.	
	3	R.R. Llinas; "The Noncontinuous Nature of Movement Execution"; Motor Control: Concepts and Issues, edited by D.R. Humphrey and HJ. Freund; (Wiley, New York), pages 223-242	
	4	Eric J. Lang, et al.; "Patterns of Spontaneous Purkinje Cell Complex Spike Activity in the Awake Rat"; The Journal of Neuroscience, April 1, 1999, 19(7), pages 2728-2739.	
	5	Vladimir Makarenko, et al.; "Experimentally determined chaotic phase synchronization in a neuronal system"; Proc. Natl. Acad. Sci. USA, vol. 95, pages 15747-15742.	
	6	John P. Welsch, et al; "Some organizing principles for the control of movement based on olivocerebeller physiology"; Progress in Brain Research, vol. 114, pages 449-461.	
	7	Vladimir I. Makarenko, et al; "A New Approach to the Analysis of Multidimensional Neuronal Activity: Markov Random Fields"; Neural Networks, Vol. 10, No. 5, pages 785-789.	
	8	E.J.Lang, et al.; "GABAergic Modulation of Complex Spike Activity by the Cerebellar Nucleoolivary Pathway in Rat"; Journal of Neurophysiology, Vol. 76, No. 1, July 1996, pages 255-275.	
	9	John P. Welsh, et al.; "Dynamic organization of motor control within the olivocerebellar system"; Nature, Vol. 374, March 30, 1995, pages 453-457.	
	10	I. Sugihara, et al; "Uniform Olivocerebellar Conduction Time Underlies Purkinje Cell Complex Spike Synchronicity in the Rat Cerebellum"; Journal of Physiology (1993), 470, pages 243-271.	
	11	K. Sasaki, et al.; "Multiple Purkinje Cell Recording In Rodent Cerebellar Cortex"; European Journal of Neuroscience, Vol. 1, pages 572-586.	
1/	12	R. Llinas, et al.; "The Functional Organization of the Olivo-Cerebellar System as Examined by Multiple Purkinje Cell Recordings"; European Journal of Neuroscience, Vol. 1, pages 587-602.	
W	13	R. Llinas; "The Intrinsic Electrophysiological Properties of Mammalian Neurons: Insights into	

Signature	Examiner Signature	/Peter Coughlan/	Date Considered	12/01/2006
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				Application Number	10/627,355	· <u> </u>		
IN	IFORMATIC	ON DI	SCLOSURE	Filing Date	July 24, 2003			,
S	TATEMENT	R BY	APPLICANT	First Named Inventor	Rodolfo R. Llinas			
				Art Unit	₩A 2129			
	(Use as many she ets as necessary)			Examiner Name	Not Yet Assigned	Peter	Co	ıghlan
Sheet	2	of	2	Attorney Docket Number	05986/100K520-U	S1		

		Central Nervous System Function"; Science, Vol. 242, pages 1654-1664 (1998).
PC	14	R. Llinas, et al.; "Oscillatory Properties of Guinea-Pig Inferior Olivary Neurones and Their Pharmacological Modulation: An In Vitro Study"; Journal of Physiology (London), 376, pages 163-182.
	15	R. Llinas, et al.; "Electrohysiology of Mammalian Inferior Olivary Neurones In Vitro. Different Types of Voltage-Dependent Ionic Conductances"; Journal of Physiology (London), 315, pages 549-567.
	16	R. Llinas, et al.; "Electronic Coupling Between Neurons in Cat Inferior Olive"; Journal of Neurophysiology, Vol. XXXVII, No. 3, 1974, pages 560-571.
	17	C. Sotelo, et al.; "Structural Study of Inferior Olivary Nucleus of hte Cat: Morphological Correlates of Electronic Coupling"; Journal of Neurophysiology, Vol. XXXVII, No. 3, 1974, pages 541-559.
	18	J.C. Eccles, et al.; "The Excitatory Synaptic Action of Climbing Fibres on the Purkinje Cells of the Cerebellum"; Journal of Physiology, (London), 182, pages 268-296.
V	19	R. Llinas, et al.; "Depolarization-Release Coupling Systems in Neurons"; Neurosciences Research Program Bulletin, Vol. 15, No. 4, pages 555-687.

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Sheet 1 of 1

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Application Number	10/627,355	
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First Named Inventor	Rodolfo R. Llinas	
Art Unit	3738 2129	
Examiner Name	Not Yet Assigned Peter Cough!	an

Attorney Docket Number 05986/100K520-US1

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PC	CA	Y. Han, et al.; "A Neural Cell Model of MSO"; IEEE 1991 Proc. 17th annual Bioengineering conf.; April 1991; pp. 121-122.	
PC	СВ	W. Maass, et al.; "On the Complexity of Learning for A Spiking Neuron"; ACM 10th annual conf. Computational Learning Theory; 1997; pp. 54-61.	

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